Morbidity Profile

This profile contains data from all of the HIV-related data systems in Texas. With the exception of the reports of positives from the 1998 CTS system, all data are from disease surveillance systems. We have used the most recent data available. In contrast to the information in the risk profile, where rates of 0 may be due to missing data, the rates of HIV, AIDS, gonorrhea, syphilis, and chlamydia, particularly in the general population, are more accurate, and thus a rate of 0 should be interpreted as a zero rate, and not considered missing information.

What information is included in this profile?

AIDS cases diagnosed in 1998 -- All AIDS cases diagnosed in 1998 which have modes of transmission related to M/MS, IDU and F/MS behavior are included in the analysis. The data are geographically sorted by the county of residence at the time the AIDS was diagnosed. The data are current as of 10/19/1999. Although new AIDS case are HIV infections which occurred a decade or more ago, AIDS case information is included because the HIV data are still relatively unstable, with limited HIV reporting starting in 1999.

Living AIDS case rates – We have also included rates based on the number of living cases of AIDS. These are cases of AIDS, diagnosed at any year in or prior to 1998, who were still alive as of October 1999. The data are geographically sorted by the county of residence at the time the AIDS was diagnosed. This measure is important since it is one indicator of the size of the infected population, because primary prevention efforts must take into account the characteristics of individuals who may be engaging in risk behaviors that transmit HIV, and because these populations are in need of secondary prevention efforts.

HIV case rates -- Reporting of HIV infections by name began in 1999. However, reported by name was not implemented retroactively, which means that only those positive tests dated 1/1/1999 or later were eligible for reporting. This means that newly discovered or confirmed infections were reported, but not those long-standing infections which had not progressed to AIDS. While HIV infection data are preferable to AIDS case data for planning purposes, the fact that “prevalent” cases of HIV infection are not included in the HIV case data mean that both AIDS and HIV infection data should be considered together to get a fuller picture for the next two to three years. The data included here show the newly reported cases of HIV from 1/1/1999 through 10/19/1999. The data are geographically sorted by the county of residence at the time the reported HIV test was run. Since this data set only contains three-quarters of a year of data, for rates, we have divided the number of cases by (0.75) to “annualize” the data. At the current time, these HIV data have the same weight as new AIDS cases or living AIDS cases; as time goes on and the

HIV data become more complete, new and living cases of HIV should become the primary epi data for HIV prevention planning purposes.

Counseling and Testing Positives -- This dataset contains information on clients who have been tested positive for HIV in 1998 through publicly funded HIV Counseling and Testing Sites. Information on risk, sex, racial/ethnic category, age at diagnosis, and county of residence at time of diagnosis are also used in analysis of this data. This information was first included in the Texas Epidemic Profile in 1997 to show the risk and risk behavior of individuals who more recently acquired HIV compared with "older" infections, represented by AIDS case data. We continue to include data on CTS positives to provide consistency from the previous profile and to provide a measure to support information from the fledgling HIV case reporting system. Date of data set: March 11, 1999.

STD cases -- This data contains information on cases of gonorrhea, chlamydia, or primary & secondary syphilis diagnosed in 1998. Information on sex, racial/ethnic category, age at diagnosis, and county of residence at time of diagnosis are also used in analysis of this data. This data does not contain information which allows us to separate MMS, IDU, and FMS cases. However, we do not assume that STD cases indicate disease only within the FMS populations, as others have sometimes assumed. While this information cannot be used to compare risky behaviors between behavioral categories, it is useful in showing that there is risky sexual activity occurring in the sub-population. The rates for these disease were calculated for sex and race/ethnicities, and then applied across risk groups. Another benefit of looking at STD information is that provides a tool for focusing on youth. Since STD diagnosis in gonorrhea and chlamydia tend to affect the adolescents and young adults more heavily than older adults, this information may be used to demonstrate the need for interventions targeting youth without having to digress through a series of tables or figures to gain this insight. Date of data set: February 4, 1999.

How was the information analyzed?

Step 1: The most recently available data sets were analyzed beginning in November of 1999. Data was analyzed by analysis zone, sex, race/ethnicity and if possible, behavioral category. Rates were calculated for each population, using the estimated population sizes referred to in Appendix 3. Rates were standardized at cases per 100,000 members of the specified population.

Step 2: To simplify display of this information, we assigned a score to a range of morbidity rates. The ranges are narrow enough to show real differences across populations. The following table indicates the score assigned to each rate.

Rate of Infection (per 100,000)	Morbidity Score
0	0
1-49	1
50-99	2
100-149	3
150-199	4
200-299	5
300-399	6
400-499	7
500-599	8
600-799	9
800-999	10
1000-1199	11
1200-1399	12
1400-1599	13
1600-1799	14
1800-1999	15
2000+	16

Step 3: TDH added up all the morbidity scores for each risk factor in three different ways.

- **Total Morbidity** – scores from all morbidity scores were added together.
- **HIV Morbidity** – scores from living AIDS case rates, AIDS incidence, HIV incidence and CTS positives rates are added together.
- **STD Morbidity** – scores from gonorrhea, chlamydia and primary & secondary syphilis case rates were added together.

Each of these totals were sorted in separate tables in order to make sure that including STD morbidity rates did not skew comparisons.

How to read the morbidity tables

The morbidity information included in this appendix is presented in the following order:

- Morbidity Rank Tables for each analysis zone
- Morbidity Score Tables for each sub-population in each analysis zone
- Morbidity Rate Tables for each sub-population in each analysis zone
- Morbidity Case Tables for each sub-population in each analysis zone

Morbidity Rank Table

This same table format is used for Total, HIV and STD related morbidity ranking.

HMAZ 44

BDTP	Race/Ethnicity	Total Morbidity Score
IDU women	African American	77
IDU men	African American	66
IDU men	Hispanic	55
M/MS	African American	52
F/MS women	African American	46
IDU women	Hispanic	30
F/MS men	African American	27
IDU men	white	25
IDU women	white	24
M/MS	Hispanic	23
M/MS	white	22
F/MS women	Hispanic	18
F/MS men	Hispanic	12
F/MS women	white	8
F/MS men	white	5

BDTP – This column identifies which behavioral group and sex is being referred to in a specific row of information. In this example, the first row of information refers to women who inject drugs.

Race/Ethnicity – This column identifies which racial/ethnic category is being referred to in a specific row of information. In this example, the first row of information refers to African Americans.

Total Morbidity Score -- This column identifies the total morbidity score for the sub-population described by the combination of BDTP and race/ethnicity columns. In this example, the first row of information indicates that in this HMAZ, in IDU African American women, the total morbidity score is 77 points.
This column has a different title depending upon which factors are used to calculate rank scores. These titles can also help you identify which information is being provided in case other identifying information is not clear. These titles are:

- **Total Morbidity Score**– sum of scores for all HIV and STD morbidity factors.
- **HIV Morbidity Score** – sum of scores for HIV related morbidity factors.
- **STD Morbidity Score** – sum of scores for STD related morbidity factors.

Morbidity Score Table

Note: the table was divided for display ease.

HMAZ 6

BDTP	Race/Ethnicity	2000+	1800-1999	1600-1799	1400-1599	1200-1399	1000-1199	800-999	600-799	500-599
M/MS	white	0	0	1	0	0	0	0	0	0
	African American	0	0	0	1	0	0	0	0	0
	Hispanic	1	0	0	0	0	0	0	0	0
IDU men	white	0	0	0	0	0	1	0	0	0
	African American	1	0	0	0	0	0	0	0	1
	Hispanic	0	0	0	0	0	0	1	0	0
IDU women	white	0	0	0	0	0	0	0	0	0
	African American	1	0	0	0	0	0	0	0	0
	Hispanic	0	0	0	0	0	0	0	0	0
F/MS men	white	0	0	0	0	0	0	0	0	0
	African American	0	0	0	0	0	0	0	0	0
	Hispanic	0	0	0	0	0	0	0	0	0
F/MS women	white	0	0	0	0	0	0	0	0	0
	African American	0	0	0	0	0	0	0	1	0
	Hispanic	0	0	0	0	0	0	0	0	0

400-499	300-399	200-299	150-199	100-149	50-99	1-49	0	Blank	Total Items	HIV Morbidity Score	STD Score	Total Morbidity Score
0	0	0	0	1	1	1	0	0	4	20	2	22
0	1	0	0	0	0	0	2	0	4	19	5	24
1	0	1	1	0	0	0	0	0	4	32	4	36
0	0	1	0	0	0	0	2	0	4	16	2	18
1	0	0	0	0	0	0	1	0	4	31	5	36
0	0	0	0	0	3	0	0	0	4	16	4	20
1	0	0	0	2	0	0	1	0	4	13	2	15
0	0	0	0	0	0	0	3	0	4	16	4	20
0	1	0	0	1	1	0	1	0	4	11	7	18
0	0	0	1	0	0	1	2	0	4	5	2	7
0	0	0	2	0	0	0	2	0	4	8	5	13
0	0	1	0	0	2	1	0	0	4	10	4	14
0	0	0	0	0	2	2	0	0	4	6	2	8
1	0	1	0	0	0	0	1	0	4	21	4	25
0	0	1	0	0	1	2	0	0	4	9	7	16

The first column of information identifies which behavioral group and sex is identified by each row of information.

The second column of information identifies which racial/ethnic category is identified by each specific row of information.

At the top of each column, you will notice a range (ex 1800-1999). This is the range of rates for HIV morbidity that refer to data in that column. The numbers in the table refer to the number of morbidity factors for each specific sub-population that fall into those rates.

The number in the blank column indicates the number of risk factors that did not have anyone in the population of interest.

The **HIV morbidity score** is the sum of the number of HIV morbidity factors in each column, times the value of that column.

The **STD morbidity score** is the sum of the number of STD morbidity factors in each column, times the value of that column.

The **Total Morbidity** score is the sum of the HIV and STD morbidity score.

Morbidity Profile Tables

These tables show the actual calculated rates by race/ethnicity group, further subdivided by HIV risk groups and sex (where appropriate). As an example, the table below is the section of the morbidity profile pertaining to whites (Anglos).

Anglo

Factor	*General*		*M/MS*	*IDU*		*F/MS*	
	Male	*Female*		*Male*	*Female*	*Male*	*Female*
Living AIDS case rate (1999)	454.0	20.3	9,926.8	4,303.4	887.0	210.3	240.7
AIDS case rate (1998)	36.9	2.8	772.7	454.8	75.5	18.3	21.5
HIV case rate (1999)	39.0	5.3	798.7	326.5	176.2	73.2	68.8
CTS Positives rate (1998)	5.3	0.7	100.6	70.0	18.9	13.7	12.9
Gonorrhea rate (1998)	34.9	36.5					
Chlamydia rate (1998)	15.9	80.0					
P&S Syphilis rate (1998)	2.6	0.3					

The first column identifies the morbidity factors discussed on page 1 of this section and the date of the information in parenthesis.

The first four rows are the morbidity factors which contain HIV risk information; since STD rates cannot be calculated by risk group, those sections of the table are shaded.

Columns identify behavioral classifications and sex. General refers to rates for the entire population, regardless of risk group or sex.

All numbers represent rates of infections per 100,000 of the indicated sub-population. THESE ARE NOT CASE COUNTS.

In the first row and first column of the table shown above, it indicates that considering all white males, the living AIDS case rate is 454 case / 100,000 men in this HMAZ. The rates, however, are very different for men in MMS, IDU, and FMS groups.

In the above section, you will also notice that some of the F/MS and IDU sections are shaded. The areas shaded indicate those morbidity rates which are based on less than 5 cases. The number of cases for these factors are indicated by the color

of the shading. In the above example, the green shading in F/MS indicates there were only 3 CTS positive tests each reported in Dallas County in 1998 for men and women. **Where there is shading, we are less confident of our calculated rates – they are unstable. We will comment in the profile when this is a problem.**

Morbidity Case Tables

This table shows the actual number of reported cases that went into the rate reported in the previous table. The table below is an example for African Americans in HMAZ 8.

African American

Factor	*General*		*M/MS*	*IDU*		*F/MS*	
	Male	*Female*		*Male*	*Female*	*Male*	*Female*
Living AIDS cases (1999)	184	40	92	62	14	15	19
AIDS cases (1998)	18	5	8	5	1	0	0
HIV cases (1999)	9	10	2	2	0	0	1
CTS Positives (1998)	12	6	6	3	1	3	5
Gonorrhea cases (1998)	234	211					
Chlamydia cases (1998)	186	403					
P&S Syphilis cases (1998)	4	4					

The first column identifies the morbidity factors discussed on page 1 of this section and the date of the information in parenthesis.

The first four rows are the morbidity factors with risk information and the last three rows are STD cases, for which no BDTP information is available. Since there is no risk information, those sections of the table are shaded.

Columns identify behavioral classifications and sex. General refers to rates for the entire race/ethnic population in the HMAZ.

All numbers represent the number of infections in the indicated sub-population.

For example, in the first row and first column of the table shown above, it indicates that 184 African American men are living with AIDS in this HMAZ.